

the resin encapsulating the coloring material being contained in a sufficient amount to provide rub-resistance to an image produced with the ink,

wherein the ink provides an ink jet recorded image with a certain optical density that is equivalent to that produced with an ink containing the self-dispersing pigment as a sole colorant at the certain solid concentration, and wherein the encapsulated coloring material is an oil-soluble dye or a water-insoluble pigment.

REMARKS

Claims 63-70 and 73-82 are pending in this application, with Claim 82 being the only independent claim. Claim 82 is amended to more clearly recite the features therein, namely, to refer to a "water-insoluble pigment" instead of a "non-self-dispersing pigment", to delete the terms "A" and "substantially equivalent", and to specify that the rub-resistance is attributed to the resin encapsulating the coloring material. It is submitted that no new matter has been added.

Claims 63-70 and 73-82 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter not described in the specification. This rejection relates to the term "non-self-dispersing pigment". Without conceding the propriety of this rejection, to expedite prosecution, Applicant has amended Claim 82 to recite a "water-insoluble pigment", as suggested by the Examiner. Support for this term may be found in the specification at least at page 16, lines 7-9.

Claims 63-70 and 73-82 were rejected under 35 U.S.C. § 112, first paragraph, on the grounds that although the specification is enabling for a solid content of 8%, it is not

enabling for any solid content. Applicant respectfully disagrees with this rejection. The present invention relates to an ink-jet ink, and if the solid content of an ink-jet ink is too high, it will cause clogging at the ink ejection orifice, making the ink impractical. In Applicant's view, since it is common technical knowledge that there is a practical upper limit to the solid content for an ink-jet ink, no undue experimentation would be required for a person skilled in the art to practice and use the subject invention. Applicant submits that in the ordinary range of solid content for ink-jet inks, the present invention functions successfully.

Claims 63-70 and 73-82 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Part of this rejection relates to the term "at a solid concentration A". Without conceding the propriety of this rejection, to expedite prosecution, Applicant has amended Claim 82 to more clearly express this feature of the claimed invention.

Another part of this rejection relates to the recitation of the resin being contained in a sufficient amount to provide rub-resistance. Without conceding the propriety of this rejection, to expedite prosecution, Applicant has amended Claim 82 to more clearly express that it is the resin encapsulating the coloring material that provides rub-resistance, as suggested by the Examiner.

A third part of the § 112, second paragraph, rejection relates to the term "substantially equivalent". Without conceding the propriety of this rejection, to expedite prosecution, Applicant has amended Claim 82 so as not to use that term.

The last part of the § 112, second paragraph, rejection relates to comparison of optical densities. Applicant respectfully disagrees with this rejection. Inks using the C-1 or C-3 carbon black dispersion are not within the scope of the invention as presently claimed, since in

C-1 and C-3, the carbon black is dispersed with a dispersant, i.e., it is not self-dispersing. Thus, Examples 1-3, 7-9 and 19-21 are not working examples of the invention as presently claimed. Applicant notes that the optical density obtained in Examples 4-5, 10-12 and 22-24 is equivalent to that of the Comparative Examples.

Applicant submits that the specification and claims comply with all aspects of § 112, and respectfully requests withdrawal of the § 112, first and second paragraph, rejections.

In view of the foregoing amendments and remarks, Applicant submits that independent Claim 82 is patentable. Applicant submits that the dependent claims also are patentable for the same reasons as Claim 82, and because they set forth additional aspects of the present invention. Separate and individual consideration of each dependent claim is respectfully requested.

Applicant submits that the instant application is in condition for allowance.

Favorable consideration, and an early Notice of Allowance are requested.

Applicant's undersigned attorney may be reached in our Washington, D.C.

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Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE TO THE CLAIMS

82. (Amended) An aqueous ink for an ink-jet printing process comprising:

a self-dispersing pigment and a resin encapsulating a coloring material, both of

which are [the self-dispersing pigment and the resin encapsulating a coloring material being]

dispersed in an aqueous medium at a certain solid concentration [A],

the resin encapsulating the coloring material being contained in a sufficient

amount to provide rub-resistance to an image produced with the ink,

wherein the ink provides an ink jet recorded image with a certain optical density

that is equivalent [or substantially equivalent] to that produced with an ink containing the self-

dispersing pigment as a sole colorant at the <u>certain</u> solid concentration [A], and wherein the

encapsulated coloring material is an oil-soluble dye or a water-insoluble [non-self-dispersing]

pigment.

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